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For over 40 years, academic librarians have been debating whether their role in the academy is similar to that of the teaching faculty or whether it should be closer to that of other professional staff. A number of different arguments have been espoused on each side of this issue, with the opinions being fairly equally divided. By performing a citation analysis on articles published by a specific group of academic librarians, this study concludes, though the evidence is somewhat inconclusive, that librarians with faculty status are likely to have a slightly greater professional impact than those without faculty status.

Headings:

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FACULTY STATUS AND THE PUBLICATION IMPACT OF ARL LIBRARIANS

by
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Barbara B. Moran

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Introduction

For over 40 years, academic librarians have been debating their role in the academy. At the heart of the debate is whether their status should be similar to that of the regular, teaching faculty, or whether it should be closer to that of other professional college or university staff such as clinicians or administrators. The intensity of the debate is marked by the fact that, after over three decades, academic libraries were split nearly down the middle on this issue: a 1999 Association of College and Research Libraries (ACRL) survey found that tenure was fully available to academic librarians at approximately 45% of the responding institutions, and fully or partially available at approximately 65%.[1]

The debate is complicated by the fact that institutions do not have a standard definition, or even a standard name, for their librarians' status. When librarians have a status similar to that of teaching faculty, it is known variably as tenure or tenure-track, faculty status, and continuous or continuing appointment. Librarians who do not have faculty status can have "academic status" or can be "professional staff."

Even when a standard term is used, it can mean different things at different institutions. ACRL attempted to standardize the definition of faculty status in June of 2007, listing faculty status standards for academic librarians under the headings of 1) professional responsibilities, 2) library governance, 3) college and university governance, 4) compensation, 5) tenure, 6) promotion, 7) leaves and research funds, and 8) academic

freedom (ACRL, 2007). While the results of this attempted standardization remain to be seen, it is currently the case that academic libraries may describe their librarians with the term "faculty status" while including only some of these standards in their policies.

Although the issue of faculty status for academic librarians is complex and complicated by a number of terminology questions that have not yet been answered, librarians continue to offer rationales for and against faculty status, with neither side clearly the victor. It is not the intent of this study to compile a comprehensive listing of these arguments, but a summary of the main justifications on each side will be useful as a framework for understanding the complexity of this issue.

The academic librarians who maintain that their status should emulate that of teaching faculty offer a number of explanations. Hoggan (2003) summarized many of these justifications. According to Hoggan, those in favor of faculty status have stated that it leads to an improved position for libraries and librarians within the university as a whole, that librarians who do research are able to adjust best to innovation, that (though this is unverified) librarians with faculty status receive a higher salary, that they have increased job security, and that they have better access to professional development, that faculty status librarians are able to have a voice in university administration, that they may have higher job satisfaction, reach any teaching goals they may have, and, finally, that they may have a higher quality and quantity of publications.[2]

In contrast, Hoggan also lists a number of potential disadvantages to faculty status for librarians. Librarians with faculty status, Hoggan writes, may experience resentment or condescension from teaching faculty, they may feel pressure to publish, they may feel a greater degree of stress from the amount of non-work time they must spend on research

and writing, they may actually only have a nominal version of faculty status (that is, the institution may not have implemented all of the Association of College and Research Libraries standards for faculty status), and they will have less time to spend on their "actual" job. Furthermore, a study of Association of Research Libraries (ARL) institutions found a negative correlation between librarians' publications and the overall scholarly output of an institution, and there is an argument as well that faculty status could be harmful to librarians' economic status in the long term because of administrators' growing understanding that outside activities detract from librarians' actual time on the job (Meyer, 1990). Finally, according to Hoggan, some librarians believe that faculty status, and the increased pressure to publish, could result in a lower publication quality.

Among other arguments for the provision of faculty status to academic librarians, one justification is that academic librarians, as scholars, should be making important contributions to the library field as a whole. Thus, as for teaching faculty, one of the measurements for tenure at almost all institutions where librarians have faculty status is scholarly publication: librarians receiving tenure are expected to have published within their fields of interest. It is likely due to this requirement that the universities with the most librarian publishing productivity are all ones at which librarians are faculty. Wiberley, Hurd, and Weller published a 2006 article demonstrating that, in an analysis of academic librarians' productivity between 1998 and 2002 in 32 library and information science journals, the five most prolific institutions, and sixteen of the top twenty, granted faculty status to their librarians.

This study evaluates the publication impact of academic librarians with and without faculty status. It will not replicate the work published by Wiberley, Hurd, and Weller, who focused on publication productivity. Rather, by performing a citation analysis on articles published by a specific group of academic librarians, this study will attempt to conclude whether librarians with faculty status are likely to have a greater professional impact than those without faculty status.

This question was initially interesting because it had no clear answer. Rather, it could be seen in several different ways. Would librarians without faculty status tend to have more impact in their publications because, without feeling pressure from tenure responsibilities, they would be able to spend more time on their research and thus publish articles with more value? Conversely, would librarians with faculty status tend to be the individuals who were more attracted to research to begin with, since they chose to work at institutions where it was more valued? Thus, would they generally produce articles with more impact, despite the pressure to publish more of them? The purpose of this study was to find the answer to these questions.

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[1] In this survey, ACRL listed eight conditions necessary for faculty status other than a tenure system: professional responsibility, a governance structure, eligible governing bodies, salary equivalence, peer review, leave, research funding, and academic freedom. For each of these categories, over half of responding libraries listed themselves as partially or fully equal to regular faculty. The results of the survey are available at http://www.virginia.edu/surveys/ACRL/1999/trends.html [retrieved August 13, 2007].

Although the survey is now eight years old, it was chosen because its 1999 date corresponds well with the dates of this study.

[2] For elaborations on these and other arguments, see White (1996), Mitchell & Reichel (1999), Montanelli & Stenstrom (1986), Kingma & McCombs (1995), Lewis (2000), Meyer (1990 and 1999), Major (1993), Benedict (1993), Horenstein (1993), Koenig, Morrison, & Roberts (1996), Hart (1999), and countless others.

Literature Review

As mentioned in the introduction to this study, there have been hundreds of articles written on the topic of faculty status for academic librarians, and its various advantages and disadvantages, since the subject was first raised in the 1960s.[3] Only a limited number of these articles, however, are significant for this study, particularly those focusing on publication practices as they relate to faculty status.

Floyd and Phillips (1997) surveyed authors and editors of library literature in an effort to determine whether publication pressure among librarians with faculty status has an impact on the quality of the publication. Although their methodology was qualitative, as opposed to the quantitative analysis performed in this study, the question that they attempted to answer is very similar. The results of this survey indicated a correlation between pressure to publish among academic librarians and a subsequent poor article quality: librarian authors most often published because of employment requirements, and a majority of editors felt that, as a result, the quality of articles by librarians was lower than in other disciplines.

However, a contrary conclusion about article quality was made in a study done of scholarly output of librarians at Pennsylvania State University (Hart, 1999). Hart used a survey to determine that publication output increased drastically after publication expectations for tenure increased at that institution. Hart also performed an analysis of the percentage of times that these publications appeared in "core" library and information

science publications to conclude that the quality of publication, as well as the quantity, was augmented with increased publication requirements.

Bradigan and Mularski (1996) went into more depth on the topic of the importance of article and monograph publications for promotion and tenure among librarians with faculty status. The results of their survey of research and doctoral-granting institutions at which librarians are afforded faculty status found that a majority of institutions require publications for tenure consideration, and that a vast majority of institutions either require or encourage publications for their librarians to receive tenure.

To support the idea of the importance of publications in the tenure process, in a 2004 study of academic librarians in Florida, Henry and Neville found that research productivity is extremely important for librarians with faculty status to gain tenure. Further, Mitchell and Swieskowski (1985) discovered that a lack of scholarly publications was the most common reason for librarians to be denied tenure. All of these results demonstrate the significance of focusing on publication output in a study of faculty status and professional impact.

There have been a number of relatively recent articles, as well, on the topic of publication practices within library and information science (LIS) as a discipline. Although most of these have not focused specifically on faculty status as an issue, their methodologies and results are informative for this study. Wiberley, Hurd, and Weller (1999, 2006) published a series of two articles on the publication practices of academic librarians in the United States in core, peer-reviewed journals. In the 2006 article, they studied 32 core LIS publications from the period 1998-2002 and found that the five most

prolific institutions, and sixteen of the top twenty, granted faculty status to their librarians.

A series of four articles studying the publication output of LIS faculty also focused on the subject of publication productivity (Hayes, 1983; Budd and Seavey, 1996; Budd, 2000; Adkins and Budd, 2006). The most recent article on this topic used the Social Science Citation Index to measure both the rate and theoretical quality of LIS faculty publications (Adkins and Budd, 2006). Although the subjects in the LIS faculty analysis were a different group than those for this study, the methodology for performing a citation analysis to measure scholarly quality is an extremely useful model.

Several other studies of LIS publication patterns also provide a context for this type of analysis and demonstrate the increasing interest in this topic among library professionals. Of these, most notable is Joswick (1999), who analyzed the quantity of publications by academic librarians in Illinois in a number of different ways, including by institution type, gender, job title, journal title, and collaborative versus individually authored. Although some of these categories are more useful than others for this study, Joswick demonstrated the number of possible ways a publication report can be analyzed. She also provided support for the use of the Social Science Citation index as a useful measurement tool.

This study will use data from Wiberley, Hurd, and Weller (2006) and model itself mainly from Adkins and Budd (2006) for its methodology. However, although these and the other cited articles provide a context for the present study, no literature has been published that has analyzed academic librarians' publication impact with a view particularly to the debate between supporters and opponents of faculty status.

[3] The first ACRL standards for faculty status were published in 1971; however, institutions had begun awarding their librarians faculty status in the late 1960s (Floyd and Phillips, 1997).

Methodology

Prior to beginning an analysis of the publication impact of librarians with faculty status, it was important to formulate a working definition of the faculty status concept. As stated in the introduction to this study, although ACRL has periodically formulated guidelines for faculty status among its member libraries, individual institutions have variably applied some, most, or all of the guidelines in their own definitions of continuous appointment, faculty status, or tenure. Thus, the ACRL standards, although providing specificity, were not a practical definition to use for this study. Instead, the study used a group of institutions that self-defined themselves as having faculty status for the basis of the analysis.

Although it was difficult to locate a study naming specific institutions that awarded their librarians faculty status, the data from a survey performed in 2000 of Association of Research Libraries institutions was obtained (M. Kyrillidou, personal communication, February 1, 2007). This data was a list of ARL libraries that were self-identified as awarding faculty status. Although the libraries on this list certainly applied the ACRL faculty status standards differently from each other, a self-defined status was felt to be the most practical in terms of this analysis.

Additionally, focusing solely at ARL institutions was found to have several other advantages in terms of this study. First, focusing on a population of libraries with many characteristics in common allowed a fairer comparison than including libraries at both

liberal arts colleges and large research institutions. Secondly, looking only at ARL libraries was useful because these institutions are larger as a whole than other college and university libraries. Thus, there was a larger body of publications to consider in the evaluation and a greater possibility of useful results. The shortcomings of excluding community college, liberal arts colleges, and non-ARL universities were offset by these advantages.

The institutions chosen to be evaluated were based on the 2006 study by Wiberley, Hurd, and Weller, of publication prolificacy. The ten most productive institutions (ranked by number of authors) in the 32 journals analyzed were Texas A&M University, Penn State University, University of Illinois at Chicago, University of Illinois at Urbana-Champaign, Ohio State University, Iowa State University, University of Michigan, Cornell University, University of Florida, and University of Iowa. Of these ten institutions, only Cornell and the University of Iowa do not, according to the ARL survey, grant faculty status to their librarians.

This study contrasted the impact factors of publications by librarians at these ten institutions with the impact factors of librarian publications at ten comparable institutions with different status for their librarians. Hence, eight of the aforementioned institutions were compared with universities without faculty status for their librarians, and Cornell and Iowa were compared to universities with librarian faculty status. To eliminate as much as possible the variability that could come with difference in institutional quality, the comparable institutions were chosen by looking at the ARL ranking index for 1999-2000 and selecting libraries with a ranking as close as possible to one of the ten aforementioned institutions. The 1999-2000 index was chosen because it falls in the

middle of the time period of the tabulated articles, as explained below.

Using this method, the remaining ten libraries selected were the University of California-Los Angeles (#8, as comparable to the University of Michigan's #6), North Carolina State University (#35; Texas A&M was #36), the University of Minnesota (#14; Penn State was #13), the University of California-Santa Barbara (#61; University of Illinois-Chicago was #59), the University of Pennsylvania (#20; Ohio State was #18), the Massachusetts Institute of Technology (#75; Iowa State was #74), Stanford University (#5; University of Illinois-Urbana-Champaign was #3), the University of Toronto (#7; Cornell was #10), Duke University (#25; Florida was #27), and Rutgers University (#31; Iowa was #30).[4]

Table 1. Institutions Analyzed and their 2000 ARL Index Ranks

Faculty Status Institutions	**2000 ARL Index Rank**	**Non-Faculty Status Institutions**	**2000 ARL Index Rank**
University of Illinois at Urbana-Champaign*	7	Stanford University	5
University of Michigan*	6	University of California-Los Angeles	8
University of Toronto	3	Cornell University*	10
Pennsylvania State University*	13	University of Minnesota	14
Ohio State University*	18	University of Pennsylvania	20
University of Florida*	27	Duke University	25
Rutgers University	31	University of Iowa*	30
Texas A&M University*	36	North Carolina State University	35
University of Illinois-Chicago*	59	University of California-Santa Barbara	61
Iowa State University*	74	Massachusetts Institute of Technology	75

*The libraries with the most productive faculty according to Wiberley, et al.

An additional advantage to this method of selection was that it created a useful

distribution in terms of institutional quality as well as geography.

A citation database, the Social Science Citation Index (part of the ISI Web of Science), was used to analyze the impact factors for librarians at each of these twenty institutions for publications from the years 1998-2002. These years were used to keep the time period identical with the period used in Wiberley, et al.[5] They also fit nicely around the year of the ARL survey, performed in 2000, and provided the most possible consistency.

The search was performed by limiting the date field to 1998-2002, and by limiting the affiliation field to the institution's abbreviated name, the "lib" abbreviation (which stands for "library" in the Web of Science terminology), and placing the operator "SAME" in between these terms. Performing the search in this manner, rather than limiting it by subject to Information and Library Science, provided more inclusive results in case some librarians published in a journal that does not appear in the Web of Science's Information and Library Science list.

Hits that were excluded from the data collection included those that were obviously not written by librarians (for instance, extremely technical scientific articles), those with a library school affiliation rather than a library (institutions with library schools returned results such as this), or those from satellite campuses (for instance, the University of Toronto-Mississauga). Articles only were included in the results: book and software reviews, editorial material, and meeting abstracts were excluded. Articles with at least one library-affiliated author were included, even if collaborating authors did not have a library address. Likewise, articles with at least one author from the campus were counted in the results, even if these authors collaborated with librarians from other

campuses.

Since not enough data were collected to produce results of statistical significance, the data were analyzed individually, using descriptive methods.

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[4] In 2000, Stanford was still a member of the Association of Research Libraries.

[5] The Web of Knowledge citation analysis for the initial ten institutions (UCLA, Illinois-Urbana-Champaign, Penn State, Minnesota, Ohio State, Penn, Texas A&M, NC State, Illinois-Chicago, and UCSB) was performed between March 26 and March 29, 2007. The citation analysis for the remaining libraries was performed between August 18 and September 23, 2007. Any citations added to the database after those dates were not included in the analysis.

Results

The twenty institutions analyzed produced widely disparate raw numbers of articles and numbers of citations. Together, the faculty status libraries produced 213 articles, with 602 total citations. However, the total number of articles varied, from 36 published between 1998 and 2002 by librarians at the University of Illinois-Chicago, to zero articles published in this time period by librarians at Rutgers. Likewise, Illinois-Chicago librarians received 144 total citations, while Rutgers librarians received, obviously, none.

Similarly varied raw numbers are revealed among the non-faculty-status libraries, although the numbers at the high end are somewhat lower since many fewer articles tended to be published by these librarians. Non-faculty status librarians published 95 articles that received 295 citations altogether. Cornell librarians were the most prolific by far, producing 28 articles that were cited 123 times. Most libraries had much lower numbers; NC State librarians published three articles during this period with a total of 14 citations, while MIT librarians received only eight citations altogether.

Table 2. Raw Data.

Faculty Status Institutions	**Total Articles**	**Total Citations**	**Non-Faculty Status Institutions**	**Total Articles**	**Total Citations**
University of Toronto	5	2	Stanford University	6	12
University of Michigan	17	48	University of California-Los Angeles	7	15
University of Illinois at Urbana-Champaign	32	144	Cornell University	28	123
Pennsylvania State University	35	40	University of Minnesota	12	32
Ohio State University	34	87	University of Pennsylvania	8	14
University of Florida	9	14	Duke University	5	19
Rutgers University	0	0	University of Iowa	12	31
Texas A&M University	33	103	North Carolina State University	3	14
University of Illinois-Chicago	36	144	University of California-Santa Barbara	6	27
Iowa State University	12	30	Massachusetts Institute of Technology	6	8
Total:	**213**	**602**	**Total:**	**95**	**295**

As it has already been demonstrated in previous literature that librarians with faculty status tend to be much more productive, in terms of numbers of publications, than librarians without faculty status, the raw numbers are not particularly significant for this study.

Averaging the number of citations per article for faculty-status versus non-faculty status libraries revealed an extremely insignificant advantage for non-faculty status

articles. The librarians without faculty status received an average of 3.1 citations per article, while librarians with faculty status received an average of 2.83.

Overall, the highest number of citations for one article was 82, for an article published by an individual at the University of Illinois at Urbana-Champaign, in collaboration with individuals at the University of Arizona, in 1998. Titled "Internet Browsing and Searching: User Evaluations of Category Maps and Concept Space Techniques," the article focused on an evaluation of algorithms to improve user searching on the Internet. The high number of citations to this article appears to be an aberration in the information and library science field and likely is due to the technology-specific topic. This statistic, therefore, does not by itself indicate a higher publication impact for librarians with faculty status, but it is worth noting.

Including this article, 8 non-faculty status articles received 10 or more citations (11.9%), while 14 faculty status articles did (15.21%). A large number of articles in both categories were never cited: 34 of the 95 non-faculty status articles had zero citations (35.8%) while 64 of the 213, or 30%, of faculty status articles received no citations.

Thus far, the numerical analyses demonstrate a slight advantage in impact for librarians with faculty status. Another measure of publication impact, however, includes the number of articles published in the premier information and library science journals, since articles in these journals would generally be the most widely read. According to many in the field, the two most significant journals for research in academic librarianship are the *Journal of Academic Librarianship* (*JAL*) and *College and Research Libraries* (*C&RL*) (Crawford, 1999).[6] Fourteen non-faculty status articles (14.7%) were published in *JAL* and *C&RL*, as were 35 faculty status articles, or 16.4 percent. Again, the

conclusion to be drawn from this data is mildly in favor of the greater impact of articles by academic librarians with faculty status.

It is worth mentioning several additional factors involved in this study. First, although publications with a Web of Science label other than "article" were tabulated during the research process, as previously mentioned they were not included in the results. The main reason to exclude non-article publications was to make certain that the analyzed publications were all of research quality, since publications such as book reviews, software reviews, and letters are generally not written to be cited.

The vast majority of excluded publications received zero citations. However, the decision to leave these publications out of the final tabulations also excluded a small number of non-article publications that received one or two citations. Generally, these items were labeled "editorial material" or "review." It is fairly certain that the inclusion of non-article publications would have inaccurately skewed the results slightly in favor of the non-faculty-status institutions, since the majority of non-article publications, as well as articles, were written by authors with faculty status (and, thus, the total number of "zero-citation" publications would have been much higher for the faculty status institutions). It was felt that the results would be more valid if non-article publications were excluded.

Secondly, when accumulating the data, several articles were included in the ISI Citation Index results that contained a library affiliation in the address, but which were clearly not related to information and library science. When this occurred, it was necessary to make a judgment about whether the article was likely authored or co-authored by a librarian in a subject field, or whether in fact the article was authored by a

non-library faculty member whose department was simply housed within the library building. In some cases, it was clear that the article should not be included: for instance, repeated articles were listed in the field of emergency medicine at one of the institutions, none of which were related even tangentially to ILS. However, there were several that were more difficult to determine, and while these were not particularly numerous, it is possible that including or excluding some of these may have made a small difference in the results of the study.

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[6] More recently, *Portal: Libraries and the Academy* has become a core journal in this field; however, it was less established during the time period studied in this paper.

Conclusion and Suggestions for Further Research

The results of this analysis are to some extent inconclusive, but they do indicate that articles written by academic librarians with faculty status have a somewhat greater impact on the ILS profession than those written by librarians who are not considered university faculty. This conclusion is all the more interesting because of the results of a study published by Bolger and Smith indicating an inverse relationship between faculty status and institutional quality (2006). One might expect that publications emanating from institutions with a higher overall quality – and, thus, without faculty status – would have a higher impact on the profession. However, the results of this study indicate the opposite.[7]

One possible objection to this methodology is that by choosing to study the libraries with the most prolific librarians, the outcome could be skewed, since eight of the ten most prolific libraries were ones in which librarians were accorded faculty status. The point could indeed be made that faculty status librarians have thus had more opportunity to compose articles of theoretically higher quality and impact. However, these librarians have also had many more opportunities to write articles of lesser quality. Ultimately, therefore, although the methodology used in this study means that less can be learned from the raw data, it does not create biased results.

One further caveat must be made: one should not draw from this study the conclusion that librarians who work at institutions where they are accorded faculty status

are necessarily better scholars. Several explanations for this phenomenon are more likely. One is that at faculty status institutions, research and publication are more generally emphasized as important. Thus, librarians there are either awarded more time to perform individual research, or they feel indirect pressure to perform such research in their personal time. The results of the research performed by librarians with faculty status, therefore, may be more significant for these reasons. Another possibility is that librarians working at faculty status institutions may be those who are personally more drawn to a career involving their own research, since most, if not all, probably realize that working in such an institution will oblige them to perform research in order to receive tenure.

There are several ways in which this study could be broadened in order to produce results that are more statistically significant. The articles chosen, published between 1998 and 2002, were from quite a limited timeframe. A new study could tabulate articles from a longer period of time so that a larger number of articles from each institution could be analyzed.

Surveying articles from a greater number of institutions would also likely create more statistically significant results. While the twenty libraries chosen for this study are from a large range of geographical areas and are fairly disparate in their ARL index ranks, including more institutions would of course elicit results that could be more easily generalized. A researcher could, finally, consider including institutions that are not members of ARL. Bolger and Smith (2006) state that most studies that have been performed on faculty status are focused on ARL institutions, which is no doubt the case. Comparing non-ARL universities and liberal arts colleges may elicit completely different

results.

The debate about faculty status for academic librarians will likely not be resolved in the near future. However, studies that provide data-driven results proving the validity of specific arguments within the debate should be valuable in individual libraries' and librarians' attempts to make decisions about this issue for themselves.

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[7] This does not refer to the ranking of the library, since that was selected in this study specifically so that there would be little variability. Rather, it refers to quality of the university as a whole. Further, Bolger and Smith were specifically studying liberal arts colleges in their article, so data could perhaps be different for ARL institutions.

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